Remote Operations Center Committee Meeting 6/2/05

Attendees:

FNAL: Jim Freeman, Erik Gottschalk, Shuichi Kunori, Patty McBride, Elliott McCrory, Suzanne Panacek, Jean Slaughter, Alvin Tollestrup OTHER LOCATIONS: Al Thomas, Sheila Cisko

Committee News – Erik Gottschalk

This meeting is being recorded. The recordings (video and audio) will be put in the Doc DB. The main reasons for making the recordings are to gain experience with the technology and to see if everyone is comfortable with recorded meetings. The advantage is that anybody who misses the meeting (several people are not here due to a LARP Review and a CDF meeting) can find out what they missed. This could be useful for the Remote Center as well.

We are considering July 21, 26 or 28 for a 3-hour meeting (with members of the Advisory Committee) to review our Requirements Document before presenting the document to Pier Oddone at the end of July. The proposal is to begin the meeting at 7:30 am (Central time) to make it easier for members of the Advisory Committee at CERN to participate.

We will add Jean Slaughter and Alvin Tollestrup to the <u>REMOP@fnal.gov</u> mailing list. This is the mailing list for the Core Committee.

Writing Requirements – Erik Gottschalk

(http://docdb.fnal.gov/CMS-public/DocDB/ShowDocument?docid=169)

The Accelerator Subgroup has been reviewing scenarios and recommends that we have a mechanism to keep track of the review process. To accommodate this request I have added three additional fields to our Scenario Template (Doc DB #113). The three fields are:

- 1) Reviewers: names of the reviewers
- 2) Reviewed: date of the review
- 3) Approved: date when the scenario was approved

I have put an outline for the Requirements Document in the Doc DB.

Alvin: Words like "commissioning and operating LHC" (in the Introduction) will raise a red flag. This can jeopardize this effort. This is a continuing theme, and we need to be more sensitive to it. The title "Remote Operations Center" should also be changed. The Global Accelerator Network (GAN) received negative feedback about this sort of thing.

Erik: I was going to suggest that we call it the Remote Center at Fermilab, or RCF. We will be more careful.

Elliott: In the LHC part of the requirements document, we could change the organization of the document so that it says Hardware and LHC Beam.

Patty: There is a lot of overlap between commissioning and additional requirements. I suggest you drop the word "additional".

Erik: The Combined Requirements is a placeholder until we have some scenarios that address this.

Elliott: Does the word audiovisual need to be there?

Erik: I'll drop "audiovisual."

Jean: We may need hardware requirements, for example we may have a requirement to duplicate the hardware that is used at CERN.

Elliott: Software Requirements could be expanded to "Computing Requirements."

Jean: Some LHC software may need specific hardware.

Shuichi: Networking is also an important topic, maybe included in computing.

(Discussion about the sample scenario):

Elliott: The actors should be the only people in the scenario.

Jean: There are too many coordinators.

Erik: I'll use the words "monitoring shifter" rather than "monitoring coordinator."

Elliott: The last assumption in your list is a requirement not an assumption.

Patty: We need to synthesize this a little more from the scenario.

Jean: I thought the requirements would include things like having an electronic logbook.

Elliott: What you have here is a protocol, so maybe the requirement is to have a well defined protocol for CERN CMS for a shift at the RCF. The 3-way communications link is a requirement.

Patty: You need to spell out which things need to be available 24/7, and which need to have continuous support.

Jean: We should say that we want the station to be at least as capable as the one at CERN.

Erik: We will change this to say there will be a protocol.

Patty: Remember, a requirement is something that is not negotiable.

Shuichi: We want to know who joined in an audio communication.

Suzanne: Is the requirement to know at all times who is participating in an audio communication?

Shuichi: Yes.

Elliott: This should come from the scenarios.

Patty: VRVS shows you who is connected. ESNet does not.

Scenario: LHC Beam Study – Elliott McCrory

(http://docdb.fnal.gov/CMS-public/DocDB/ShowDocument?docid=128)

Patty: The review of this scenario should include someone at CERN. "Special privileges" in the scenario may raise some eyebrows. Maybe soften this a little bit. Just say that the video connections are unavailable. How many video connections will we have?

Elliott: There really is no need for video connection during the long process of collecting measurements.

Patty: We'll have to determine how many video connections there will be.

Suzanne: I think we will have noise problems with all these video connections.

Patty: Yes, we'll have to use headphones.

CMS HCAL Remote Operations – Jim Freeman

We have a setup with 24-hour continuous VRVS room. We have an electronic logbook and web cams. We take runs that are controlled by people at CERN, followed by quick data quality check at CERN, and more detailed analysis here at Fermilab. We have formal shifts with shift schedules.

Now we are trying to start up again (last week of June). The same analysis tools are used here as at CERN. Shifts are from 3 - 8 pm here. We analyze the evening data and give them feedback before they start working at CERN the following morning.

In September we will do the same thing with another part of the detector, and in January we will do the vertical slice test. There will be a school for 10 days in August on PVSS (N.B. The dates are July 25 – August 8).

Patty: Do you want to control anything during this period?

Jim: For safety reasons I would not want control. Maybe we would want to turn something off (a crash button), but certainly not to turn something on. I can imagine that we do not initiate runs, we ask someone there to initiate them at CERN.

Erik: PVSS allows for individual privileges. How will this feed into our requirements.

Patty: I don't know the specifics; if they can do it at CERN then it should be possible to do it from here. You may have to explicitly forbid it. We need to learn more about PVSS. Maybe someone in our group wants to take that class.

Erik: I'm interested in taking the class.

Shuichi: We may want to make a list of some tools (web camera, etc.) that are needed for the RCF.

Erik: Can this wait until we do the cost estimates?

Shuichi: It may be helpful to start thinking about it now.

Suzanne: Simulation of the LHC will be very useful for deploying software that will could influence the beam.

Patty: This may be more in the scope of LARP.

Next meeting: June 9, 2005 in the **Hornet's Nest (WH 8X)**